

1 CLAIMS

2 What is claimed is:

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4 Claim 1. A sealing cap for a caulking tube nozzle
5 comprising:

6 a body member, said body member including a solid top
7 portion and a depending annular wall, said top portion and said
8 annular wall having a common outer surface, said solid top
9 portion and said annular wall forming an inner cavity, said
10 inner cavity including a caulking tube tip engagement means and
11 at least one sealing means;

12 wherein said engagement means cooperates with said
13 caulking tube tip to provide compressive engagement between
14 said at least one sealing means and said caulking tube tip
15 thereby preventing air from entering said caulking tube.
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17 Claim 2. The caulking tube sealing cap in accordance with
18 claim 1 wherein said caulking tube tip engagement means
19 includes internal helical threads, wherein said helical
20 internal threads are constructed and arranged to cooperate with
21 said caulking tube tip to allow said sealing cap and said
22 caulking tube tip to be interlocked in an axial relationship.
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24 Claim 3. The caulking tube sealing cap in accordance with
25 claim 2 wherein said internal threads are constructed and

1 arranged to form threads on an external surface of said
2 caulking tube tip.

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4 Claim 4. The caulking tube sealing cap in accordance with
5 claim 2 wherein said internal threads are constructed and
6 arranged to cut threads on said external surface of said
7 caulking tube tip.

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9 Claim 5. The caulking tube sealing cap in accordance with
10 claim 2 wherein said helical threads include multiple leads.

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12 Claim 6. The caulking tube sealing cap in accordance with
13 claim 2 wherein said internal cavity is conjugate in shape with
14 respect to said caulking tube tip.

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16 Claim 7. The caulking tube sealing cap in accordance with
17 claim 1 wherein said outer surface includes a gripping means
18 constructed and arranged to provide gripping for rotational
19 engagement between said caulking tube tip and said sealing cap;

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21 Claim 8. The caulking tube sealing cap in accordance with
22 claim 7 wherein said outer surface gripping means is integrally
23 formed on said outer surface.

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25 Claim 9. The caulking tube sealing cap in accordance with

1 claim 8 wherein said outer surface gripping means includes
2 knurling.

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4 Claim 10. The caulking tube sealing cap in accordance with
5 claim 9 wherein said knurling is selected from the group
6 consisting of straight knurling, diagonal knurling and diamond
7 knurling.

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9 Claim 11. The caulking tube sealing cap in accordance with
10 claim 1 wherein said at least one sealing means includes an
11 integrally formed sealing ring, wherein said sealing ring is
12 constructed and arranged to compressively engage said caulking
13 tube tip to prevent air from entering said caulking tube tip.

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15 Claim 12. The caulking tube sealing cap in accordance
16 with claim 11 wherein said sealing ring comprises an
17 elastomeric ring, wherein said elastomeric ring is integrally
18 molded within said internal cavity.

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20 Claim 13. The caulking tube sealing cap in accordance
21 with claim 11 wherein said sealing ring comprises a metal ring,
22 wherein said metal ring is integrally molded within said
23 internal cavity.

1 Claim 14. The caulking tube sealing cap in accordance with
2 claim 1 wherein said at least one sealing means includes an
3 O-ring.

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5 Claim 15. The caulking tube sealing cap in accordance with
6 claim 14 wherein said O-ring is constructed from a material
7 selected from the group consisting of Cork, Gasket Material,
8 Leather, Rubber, Buna-N, Silicone, Neoprene,
9 Tetraflouroethylene and Viton.

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11 Claim 16. The caulking tube sealing cap in accordance with
12 claim 1 wherein said sealing cap is constructed from a material
13 selected from the group consisting of elastomeric materials,
14 polymeric materials or metals.